IDEAL PARK IP1-CM FF41

General Specification

IP1-CM FF41 model is a CAR LIFT. It was designed to solve parking problems avoiding the ramp to access to the underground garages, carrying the cars to lower level occupying less than 15 sqm of surface.
It has a cover that works as a roof, in metal sheet or ready to be paved until 150 kg/sqm weight.
The car lift must be installed in a proper shaft with the dimensions listed in the technical data sheet.
The system is moved by an hydraulic group made by an electric motor and a screw pump that lower and lift the platform dock.
The control system is situated at ground floor, working in "hold to run" modus: the user must push the command and maintain it pushed until the end of the run. The voltage of the control system is 24 V.
The use instructions are placed always near to the control system, in a well readable position.

Design and description

The system is made by different components:
Rails: made by UNP profiles, with 4 fixed columns bolted to the shaft side walls and 4 sliding columns with wheels, on which the platform is fixed. Two stiffener beams are fixed to the sliding columns, in order to distribute the thrust equally on both sides.
Parking platform: made by 2 sides in shaped plate, by tubular frames supporting 6 embossed metal sheets to cover the structure and no. 4 connection beams.
-Plant Cover, made by steel tubular frames and panels in corrugated metal sheet (if made for paving), or in embossed metal sheets. The roof is lifted up by the sliding columns. On the profile of the roof it is placed a dripstone connected to the drainpipe on the edges of the shaft to drain the rain.
Lifting system:
The parking platform movement is generated by the trust of 2 hydraulic cylinders, placed below the platform.
On the top of them there is a roller pulley (tackle), the connection between the parking platform and the lifting mechanism is realized through a couple of ropes for each side, connected to the sliding columns.
Directly on the cylinders there are the safety hydraulic locking valves to avoid the runaway descent of the plant in case of pipelines cuttings
Oleodinamic plant and hydraulic system

- The hydraulic power pack feeds the oleodinamic plant, via the commands on the control panels. It is made by: a tank to contain the oil, a hydraulic gear pump and one or two different motors (380 V, 50 Hz, 5,5 kW power).
- The hydraulic power-pack has a pressure gauge to check oil pressure, a locking valve, an electro-valve for the descent with a manual emergency command, a flow regulator on descent, an oil level gauge.
- N. 2 in tackle single-effect hydraulic cylinders with double rope
- Self-leveling hydraulic cylinders by mechanical structural effect
- Hydraulic circuit with electrolytic galvanized pipes, fittings and pressure hoses.
- The ending parts of the hydraulic pipelines are flexible tubes SAE100R2.
- All the components are certified.

Electric components:

- Electric system wires are in according to CEI 64-2/A Regulations
- A "Hold-To-Run" 24 V electric control panel at ground floor, IP54 protection, manually operated by the user with authorization key switch, operations buttons selector and emergency push-button.
- Main switch cabinet with PLC control and self-diagnostic on integrated

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LCD display IP55 protection with electric and electronic components to operate unit;
- Electric motor 380 V., 3ph, 5,5kW, IP54 protection;
- All the components are double in the safety circuits with safety modules certified by the suppliers;
- Interface between the doors automation and car lift electric board logic

Coatings of surfaces

All the surfaces are hot deep galvanized. The cylinders are varnished. In option: TRIPLEX treatment of the surfaces for a durable colour effect.

Available options

- Light barriers on board of the platform to ensure correct car stop positioning
- ***Light barriers installed to prevent raising of car lift when another car is parked on top of the system.***
- Mechanical blocks (in option) with automatic command
- Automatic opening of the door
- Perimetrical photocells anti-shearing
- Photocells to read objects on the roof
- Photocells anti-crushing

At Customer care

- Shaft construction works;
- supply and installation of the metal profile at the edge of the shaft;
- roof pavement;
- connections to existing sewer net for rain drainage;
- perimetrical protections;
- electric supply lines with lockable main switch to the electric board of the car lft;
- all the details not specifically mentioned in the order.

Idealpark reserves the right to modify some features in order to improve the product.

Ideal Park